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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/579,658	05/26/2000	Ralph Moorhouse	B-0103.27	8015

7590

04/09/2003

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EXAMINER

TUCKER, PHILIP C

ART UNIT

PAPER NUMBER

1712

DATE MAILED: 04/09/2003

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

579658

Applicant(s)

MOORHOUSE

Examiner

P. TUCKER

Group Art Unit

1712

—Th MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-60 is/are pending in the application.
- ☐ Of the above claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 21-39 is/are allowed.
- ☒ Claim(s) 1-7, 11-20, 40-48, 51-60 is/are rejected.
- ☒ Claim(s) 8-10, 49, 50 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
 - ☐ received in Application No. (Series Code/Serial Number) _____
 - ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 is directed to mixed alkaline metal compounds, while depending from a claim that is directed to a fracturing fluid.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1-7, 11-20, 40-48 and 51-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemanczyk et al. (4784694).

Lemanczyk teaches a wellbore fluid which is used in fracturing operations, which comprises a guar polymer, a crosslinking agent, citric acid and sodium citrate, an alkaline buffer such as magnesium oxide, and a stabilizer such as thiourea (see claims , Tables). The pH of 8.5 is encompassed by "about 9" of the present invention (column 2, lines 44-48). Lemanczyk differs from the present invention in that the specific crosslinking agent, and the amount of polymer and constituents therein are not specifically disclosed. Lemanczyk teaches that zirconium crosslinking agents may be used in forming the crosslinked gel of the fluid (see column 2, lines 24-25 and 34-35). It would thus be obvious to one of ordinary skill in the art to utilize well known zirconium crosslinking agents in the fluid of Lemanczyk, given the teaching of Lemanczyk that such are useful in forming the fracturing fluid therein. Applicant teaches the use of the range of 10 to 100 PPTG of polymer, which is typical for fracturing fluids comprising guar gums. The use of a polymer loading of 10 to 100 PPTG by Lemanczyk would be obvious to of ordinary skill in the art, since such is typical for a hydraulic fracturing composition, and the relative amounts of the citric acid, thiourea and magnesium oxide would be rendered obvious from the teaching of the relative amounts of these components to the polymer by Lemanczyk (see Table II, claims 1 and 16).

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5. Claims 8-10, 49 and 50 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 21-39 are allowable over the art of record.

7. The following is a statement of reasons for the indication of allowable subject matter:
Applicants specification teaches that the order of adding the stabilizer and polymer is critical, and obtains superior results, which are not taught by the prior art..

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Tucker whose telephone number is (703) 308-0529. The examiner's normal working hours are 7:30am-4:00pm, Monday-Friday. If necessary SPE Robert Dawson may be contacted at 703-308-2340. For inquiries of a general nature call the receptionist at 703-308-0651. The group FAX no. is 703-872-9310. The **after final** fax no. Is 703-872-9311.

PCT-2777
April 4, 2003


PHILIP C. TUCKER
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